

Amendment and Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure

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Serial No.: 09/762,224

Confirmation No.: 2859

Filed: 30 July 2001 (35 USC §371)

For: PSEUDOTYPED RETROVIRUSES AND STABLE CELL LINES FOR THEIR PRODUCTION**Amendments to the Claims**

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

Listing of Claims

1. (Currently Amended) A pseudotyped-retrovirus-producing eukaryotic cell, comprising a eukaryotic cell including nucleotide sequences operatively encoding components of a pseudotyped retrovirus, said nucleotide sequences comprising:

- (a) a first nucleotide sequence operably encoding a retroviral Gag polypeptide;
- (b) a second nucleotide sequence operably encoding a retroviral Pro polypeptide;
- (c) a third nucleotide sequence operably encoding a retroviral Pol polypeptide; and
- (d) a fourth nucleotide sequence operably encoding at least two different Ross River alphaviral viral glycoproteins[(.]);

wherein the retroviral Gag, Pol and Pro polypeptides are Moloney murine leukemia polypeptides.

2. (Previously presented) The cell of claim 1, wherein said cell further comprises a fifth nucleotide sequence having a 5' and a 3' end, said fifth nucleotide sequence encoding a selected protein, said fifth nucleotide sequence operably linked at said 5' end to a first retroviral long terminal repeat sequence and operably linked at said 3' end to a second retroviral long terminal repeat sequence.

3. (Previously presented) The cell of claim 2, wherein said selected protein is a marker.

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4. (Original) The cell of claim 3, wherein said marker is a fluorescent protein.

5 - 7. (Canceled)

8. (Original) The cell of claim 1, wherein said eukaryotic cell is a mammalian cell.

9. (Original) The cell of claim 8, whererin said mammalian cell is a human cell.

10. (Canceled)

11. (Currently amended) The cell of claim 1, wherein said cell produces a pseudotyped retrovirus having a lipid bilayer. said Ross River alphaviral viral glycoproteins disposed in said lipid bilayer.

12. (Original) The cell of claim 1, wherein said first, second, third and fourth nucleotide sequences are chromosomally-integrated.

13 - 18. (Canceled)

19. (Currently Amended) A method of modifying a eukaryotic cell to prepare a pseudotyped-retrovirus-producing eukaryotic cell, said method comprising:

transfected a eukaryotic cell with a first nucleotide sequence operably encoding a retroviral Gag polypeptide, a second nucleotide sequence operably encoding a retroviral Pro polypeptide, a third nucleotide sequence operably encoding a retroviral Pol polypeptide and a fourth nucleotide sequence operably encoding at least two different Ross River alphaviral viral glycoproteins[. . .];

wherein the retroviral Gag, Pol and Pro polypeptides are Moloney murine leukemia polypeptides.

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20. (Original) The method of claim 19, wherein said first, second and third nucleotide sequences are operably linked to a promoter sequence.

21 - 22. (Cancelled)

24. (Original) The method of claim 19; wherein said first, second, third and fourth nucleotide sequences are chromosomally-integrated.

25. (Previously presented) The method of claim 19, wherein said cell further comprises a fifth nucleotide sequence having a 5' end and a 3' end, said fifth nucleotide sequence encoding a selected protein, said fifth nucleotide sequence operably linked at said 5' end to a first retroviral long terminal repeat sequence and operably linked at said 3' end to a second retroviral long terminal repeat sequence.

26. (Currently amended) A method of modifying a eukaryotic cell to prepare a pseudotyped-retrovirus-producing eukaryotic cell, said method comprising:

(a) transfecting a eukaryotic cell with a vector including a first nucleotide sequence encoding a retroviral Gag polypeptide, a second nucleotide sequence encoding a retroviral Pro polypeptide and a third nucleotide sequence encoding a retroviral Pol polypeptide, said first, second and third nucleotide sequences operably linked to a first promoter sequence, wherein the retroviral Gag, Pol and Pro polypeptides are Moloney murine leukemia polypeptides; and

(b) transfecting said cell with a fourth nucleotide sequence encoding at least two Ross River alphaviral viral glycoproteins, said fourth nucleotide sequence operably linked to a second promoter sequence.

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27. (Previously presented) The method of claim 26, said method further comprising transfecting said cell with a vector including a fifth nucleotide sequence having a 5' and a 3' end, said fifth nucleotide sequence encoding a selected protein, said fifth nucleotide sequence operably linked at said 5' end to a first retroviral long terminal repeat sequence and operably linked at said 3' end to a second retroviral long terminal repeat sequence.

28. (Previously presented) The method of claim 26, wherein said selected protein is a marker.

29. (Original) The method of claim 26, wherein said first, second, third and fourth nucleotide sequences are chromosomally-integrated.

30 - 32. (Canceled)

33. (Currently amended) A pseudotyped retrovirus, comprising:

(a) a retroviral Moloney murine leukemia virus capsid;
(b) a lipid bilayer; said lipid bilayer surrounding said retroviral Moloney murine leukemia virus capsid; and
(c) at least two different Ross River alphaviral viral glycoproteins disposed in said lipid bilayer.

34. (Previously presented) The retrovirus of claim 33, said retrovirus further comprising a nucleotide sequence encoding a selected protein, said nucleotide sequence enclosed within said retroviral capsid.

35 - 39. (Canceled)

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40. (Currently amended) A method of introducing a selected nucleotide sequence into a cell comprising transducing a cell with a pseudotyped retrovirus, said pseudotyped retrovirus comprising:

a selected nucleotide sequence;

a retroviral Moloney murine leukemia virus capsid;

a lipid bilayer surrounding said retroviral Moloney murine leukemia virus capsid; and

at least two different Ross River alphaviral viral glycoproteins disposed in said lipid bilayer;

wherein said cell is permissive for entry of a pseudotyped retrovirus having at least two different Ross River alphaviral viral glycoproteins in its lipid bilayer.

41 - 52. (Canceled)

53. (Currently amended) A kit for modifying a eukaryotic cell to prepare a pseudotyped-retrovirus-producing eukaryotic cell, said kit comprising:

(a) a first nucleotide sequence operably encoding a retroviral Gag polypeptide;

(b) a second nucleotide sequence operably encoding a retroviral Pro polypeptide;

(c) a third nucleotide sequence operably encoding a retroviral Pol polypeptide, whercin the retroviral Gag, Pol and Pro polypeptides are Moloney murine leukemia polypeptides; and

(d) a fourth nucleotide sequence operably encoding at least two different Ross River alphaviral viral glycoproteins; and

(e) means for transfecting a eukaryotic cell with said first, second, third, and fourth nucleotide sequences.

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54 - 55. (Canceled)

56. (Previously presented) The method of claim 19, wherein the first, second, third, and fourth nucleotide sequences are provided on plasmid vectors.

57. (Previously presented) The method of claim 56, wherein the first, second, and third nucleotide sequences are contiguous on a single plasmid vector.

58. (Previously presented) The method of claim 57, wherein the fourth nucleotide sequence is on a different plasmid vector.